

BITUMINOUS FLAT ROOFING, UNDERSLATING & SHINGLES

Roofing systems and maintenance products have come a long way in recent years; with the high performance bitumen felt membranes now having a life expectancy of up to 20 years. We have seen the arrival of superior performance felts with new application techniques including torch-on and self adhesive, instead of the traditional 'pour and roll' method of bituminous flat roofing, which uses bitumen heated to over 200°C. Traditional fibre based felts can age quickly, become brittle and be easily damaged through weathering. Repairs can always be made to extend the life of the roof for a

short while but in the long run, a complete re-covering is the only real answer.

Today roofing felts are usually referred to as 'bituminous reinforced membranes' and while the felts may look much the same as yesterday's, the performance and materials used in their development have improved dramatically, increasing resistance to aging and weathering. These developments have helped ensure that roofing felts meet customer needs and that of Building Regulations. One of the latest developments in roofing felt is a

high performance 'cold applied' Self Adhesive system, such as Wickes Easy Seal. This eliminates the need for hot bitumen, gas torches or liquid roofing adhesive.

The purpose of this leaflet is to introduce you to some of the roofing materials and application methods now available, advise on common problems and guide you through the Wickes flat roofing systems, enabling you to make informed choices, be confident using the products, safely, quickly and at a sensible cost.



Roof Design & Good Practice

Ideally all flat roofs should be inspected once every six months, in the Spring and Autumn. Only once you are satisfied that it is safe, should you go onto the roof. Always make sure someone reliable is either watching you or checking on your welfare every few minutes. Check the outlets, projections, gutters, rooflights and flashing. If any of the surface chippings have become displaced they should be swept back into position.

In Autumn it is important to check that fallen leaves do not block the gutters and outlets, which could cause water to pond. Do not flush anything down the outlets.

In Spring it is also the time to look for frost damage to the pointing which may allow the roof structure to become damp.

Prior to venturing onto the roof, look for evidence of sagging, leaks, condensation or decay from below and/or overlooking windows. If the decking is visible from below test the integrity of the deck by pushing from the underside with a blunt pole. Chipboard, particleboard, wood fibre and woodwool decks are particularly vulnerable to decay. Even if a roof has not leaked, decks (like certain grades of chipboard) may have been severely affected by condensation and may be unstable and fragile. It is quite possible to fall through a weakened roof structure and injure yourself. If in doubt, get expert advice before accessing your roof.

KEEP INFORMED

- Look for other Good Idea Leaflets that could help you with your current project.
- Check that your Good Idea Leaflets are kept up to date. Leaflets are regularly changed to reflect product changes so keep an eye on issue dates.
- If you would like to be put on our mailing list for the Wickes booklet, call our Freephone number which is:
0500 300 328
- Visit our website at www.wickes.co.uk

DOs & DON'Ts

DO deal with a leak as soon as it is noticed.

DO check with the original specification to identify the roof build up.

DO consider repair now rather than costly replacement later.

DO check before and after any work is carried out on or near the flat roof. In this way damage caused by other people will be easily identifiable.

DON'T use the roof as a working platform for adjoining buildings.

Where access is required, protection must be given so as not to damage the waterproofing membrane.

DON'T allow other people to fix units through the waterproofing membrane without proper advice. This is especially important when having television aerials, satellite dishes and telephone cables installed.

DON'T drop cement, paint or solvents on the roof, as these will damage the surface.

Leaking Roof

Should you find a leak, don't worry, one of the Wickes Roof Repair Products (shown in Wickes Good Idea Leaflet 99) will get you out of trouble in the short term. This should allow you to plan your project for a more convenient time - but don't just ignore the leak, no matter how small, it will get larger, and possibly very quickly!

What next:

- Decide whether to call in a Trades person, do the job yourself, or get a friend to help.
- Plan, and cost your job.
- Make a shopping list.
- Decide if you need to replace the deck.
- If it's a new flat roof on a habitable building, it may be necessary to contact your local building control office.
- **DON'T** be tempted to cut corners; this will probably cost you twice as much, in time, effort and money, later on.
- **DO** the job correctly first time. With good preparation and materials it will last a long time.

Which system do I use?

Roof covering options range from the traditional rag based bitumen based felts, to the most modern, technically advanced and very simple to use, self-adhesive coverings.

Our recommended solution is the cold lay method using the self-adhesive 'Wickes Easy Seal'.

Roofing Felt Performance Selector

- * Minimum 20° roof pitch.
- ** Minimum 15° roof pitch for normal exposure roof with 1 or 2 layer High Performance underlay - otherwise minimum 20° pitch.
- *** These products are suitable for use on habitable buildings

What do I need to Know?

The first point to be made is, when re-covering a roof, all old felt must be removed and the surface on which it was laid must be carefully checked and if necessary, made good. If roofing felt has been defective for some time, there is every chance that constant wetting may have caused damage, and rot may be present or developing. Any damaged timber or boarding must be replaced, including fascia timbers, angle fillets, drip battening, decking and occasionally the supporting joists. It is a costly mistake to put new covering over a less than perfect surface.

Building Regulations

It is important to be aware of the existing Building Regulations concerning the design and construction of flat roof structures. In new constructions and some re-roofing projects, it may be necessary to consult your local council Building Control office with regards to compliance with Building Regulations. For information relating to current insulation requirements, refer to **Part L1** and **L2**.

Design considerations

On a flat roof, the waterproofing is always supported by a structural roof deck. This is usually a timber boarding of some type, which in turn is supported on joists.

With the exception of garages, most roofs above the habitable part of the house require insulation.

The most common method is where the insulation is located immediately above the ceiling. This is known as a cold roof (**Fig. 1**). In cold weather, the roof could be prone to condensation if adequate through-ventilation is not provided. Refer to BS 6229: 2003. Alternatively, the insulation may be placed above the roof deck. This is known as the warm roof design (**Fig. 2**): If using the preferred Easy Seal System then the insulation used must be of an urethane/plywood composite board with the plywood face on the top surface.

Fig. 1 Cold roof

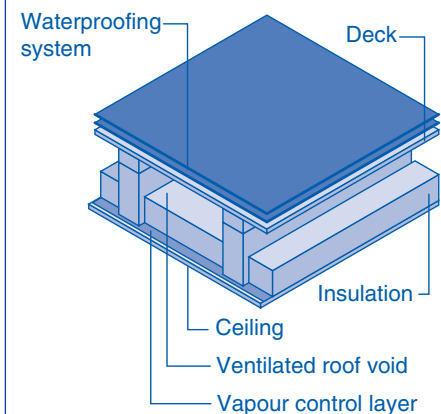
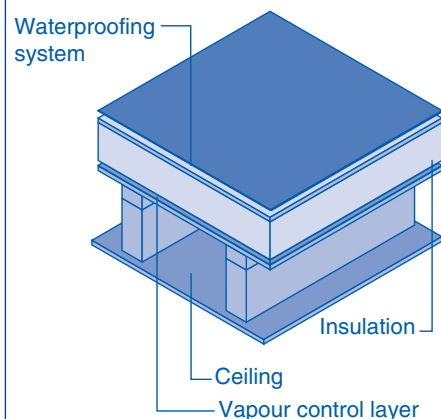


Fig. 2 Warm roof



DECK MATERIALS

It is important that the right materials are used for constructing or strengthening a flat roof deck.

The following are some commonly used types:

Plywood Deck (Recommended)

This should be exterior grade type WBP bonded in accordance with BS 6566: Part 8: 1995. A minimum thickness of 18mm is recommended. This can be purchased from any Wickes Store.

OSB 3 Bituminised & Conditioned Decking

Oriented Strand Board (OSB) should be a minimum thickness of 18mm and be manufactured in accordance with **BS EN 300: Part 3: 1992**.

OSB 3 Bituminised decking can be purchased from any Wickes stores.

OSB 3 Conditioned decking – selected stores only.

Timber boarding

Where an existing deck comprises of minimum 18mm close boarded tongued and grooved timber, it is recommended that our Exterior WBP 6mm plywood be used to overlay the deck. This should be installed to provide a smooth homogeneous surface onto which the Easy Seal System can bond. This can be purchased from any Wickes Store. Should damage be discovered, and depending on the extent, it may simply be a

	*Fine Green Mineral Shed Felt	*Super Shed Felt	Trade Traditional Roofing Felt	***High Performance Polyester Roofing Felt	***Torch On	***Easy Seal Self Adhesive	**Wickes Roofing Shingles	***Reinforced Slaters Felt under slates or tiles	***Wickes Breathable Membrane under slates or tiles
Hutch/Kennel/Small Garden Shed	Yes 1 Layer (5 Years)	Yes 1 Layer (15 Years)	Yes 2 or 3 Layer (10 Years)	Yes 1 Layer (10 Years)	No	No	Yes 25 Years	No	No
Quality Garden Buildings/ Detached Garages/ Workshops	No	Yes 1 Layer (15 Years)	Yes 2 or 3 Layer (10 Years)	Yes 2 or 3 Layer (15 Years)	Yes 2 or 3 Layer (15 Years)	Yes 2 Layer (20 Years)	Yes 25 Years	Yes 1 Layer	Yes 1 Layer
Attached Garages/ Extensions/ Dormer Windows	No	No	No	Yes 2 or 3 layer (15 Years)	Yes 2 or 3 Layer (15 Years)	Yes 2 Layer (20 Years)	No	Yes 1 Layer	Yes 1 Layer
Habitable Tiled Roofs	No	No	No	No	No	No	No	Yes 1 Layer	Yes 1 Layer

Note: All life expectancies and performance assume fitting in accordance with manufacturers' instructions, to a good sound base.

case of replacing a board or two, assuming they are in a position that will allow for easy replacement. This then would be the preferred solution although you'll still need the 6mm Plywood overlay.

If the damage to the timber tongued and grooved decking is extensive, it would make more sense to remove all the close boarded timber and replace with 18mm Plywood.

Note: If any rot is found, or suspected, the timber must be removed. All surrounding wood should be treated, before fixing new timber/decking.

Chipboard

Although frequently used for garden buildings, and some garages, it is not suitable for habitable building roofs, and as a rule of thumb, it is generally not suitable for roofs with ceilings.

If chipboard is to be used, it should be a moisture resistant P5 grade.

Concrete

Common in roofs to blocks of flats and some pre-war houses, concrete is a stable and reliable deck material. If this needs repair, provision should be made for drying out before any priming or waterproofing covering is laid.

Essential for a successful flat roof

Like any part of a building's exterior, flat roofs should be constructed to withstand natural and human forces with the minimum of attention. If laying large sheets of decking such as 8ft by 4ft Plywood, do not tightly butt joint them. Leave a 4mm gap on the short lengths and 2mm gap along the long edges to allow for expansion.

Protection from rain & snow

The finished roof should have a slope that achieves at least 1 in 80. With a new deck it's sensible to design it with a 1 in 40 fall to be sure. It is best to drain the roof to one or two edges. Conventional eaves gutters are better than internal outlets.

Internal outlets should be adequately sized to deal with storm conditions and be fitted with clamping rings, leaf and gravel guards.

The waterproofing should extend up adjacent walls at least 150mm from the finished roof surface in all situations. The top edge of felt should be protected by a cover flashing.

Protection from sun and frost

It pays to insulate: heating bills will be lower in the winter, and rooms will be cooler in the summer. Insulation of new flat roofs must satisfy the Building Regulations, **Part L1** and **L2**.

Protection from condensation

Cold roofs should have adequate through ventilation in the void space

All insulated roofs require a vapour control layer.

Protection from the wind

All roofs should be constructed to resist wind forces.

For buildings in exposed locations, or areas prone to extremes of weather, you can obtain additional advice from your local Building Control Office.

Protection from people

Don't let people walk or work on your roof without first protecting the surface and supporting the structure if necessary.

If the use of the roof is changed, the structure may have to be strengthened.

Weather & Temperature

Now you have assembled all the materials, tools and equipment you need, the final consideration before beginning your roofing job is the weather. Try to ensure that the weather will be dry all day and if possible that conditions are warm. NB. Do not start removing existing roof coverings until weather conditions have been confirmed and all the materials for the job have been assembled and checked ready for use.

Wickes Easy Seal Roofing System is easiest to use at a temperatures above 10°C. If it is difficult to achieve this temperature whilst working on the roof, it is recommended that the material be stored in a warm environment for 24 hours prior to use. If it is necessary to work on the roof in cold weather, then the gentle warming of the adhesive side of the felt with an electric hot air paint stripper or similar (not a naked flame) will help the adhesive properties of the material. Also warm the material prior to folding. If temperatures become extreme it is advisable to postpone the project until more favourable temperatures pertain.

Make good & mend

Inspect the condition of the existing roof structure and deck prior to commencement of roofing. Make any structural repairs that are necessary and ensure that the surface area of the roof is free from obstructions, smooth, clean and dry prior to the beginning of the project.

The right sequence

It is advisable to plan the sequence of your roofing job to ensure that you have the right materials at the right time. If in doubt, read the instructions through completely first noting the sequence in which you will use the materials.

Safe working practice

When working at height HSE guidelines dictate that a safety guardrail must be erected around the perimeter of the roof and ladders should be fixed to the guardrail and secured at the foot to prevent slipping. For further information, seek professional advice, contact the HSE on **0845 345 0055** or visit **www.hse.gov.uk**

Working at heights – The facts

- According to the Health & Safety Executive approximately 4,000 people per year suffer from serious injuries and 50 are killed as a result of falling from height.

- Falls are the largest cause of fatalities in the work place.
- 60% of all major injuries are caused from falls below 2 metres.
- Nearly a quarter of all fatalities and major injuries are caused by falls from ladders.

The Working at Height Regulations (**WAHR**), introduced during 2005, purpose is to reduce the number of accidents associated with Working at Height.

To achieve this they adopt three basic principles:

- i) If practicable, avoid working at height
- ii) Use the most suitable equipment and method of work to prevent falls
- iii) Reduce the consequences of any fall by use of appropriate fall arrest systems.

Employers, Employees and the Self-employed, undertaking work at height, will be affected by the Regulations.

WICKES EASY SEAL SELF ADHESIVE ROOFING SYSTEM

The Easy Seal system has been developed to make flat roofing safe, straightforward and economical for the DIY'er, jobbing builder and the roofing professional. Only a few tools are required. Wickes Easy Seal System is a self-adhesive polyester based; SBS polymer modified bitumen coated roof covering. The cap sheet is surfaced with attractive green slate granules that requires no further treatment. The system has a BBA certificate 02/3916 for use on habitable buildings, and an external fire rating of **F.A.C.** The Wickes Easy Seal system complies with Building Regulations: England, Wales, Scotland and Northern Ireland.

It is one of the cleanest, simplest and quickest covering systems available. It is ideal for homeowners with only basic DIY skills and a limited tool kit, right through to experienced tradesman, who need a strong, long life, safe, flame free system.

Note: This system is not suitable for overlaying existing roof felts unless an isolating layer is fixed over on the flat roof area. Securely fixed 6mm minimum WPB plywood is suitable, available in store. The existing waterproofing to all of the details would still need to be removed. For Easy Seal to work properly it needs a smooth firm, clean and dry surface to adhere to.

Wickes Easy Seal S.A. (Self Adhesive) Primer

The primer should be applied to all timber, concrete, screed, metal and masonry surfaces, prior to applying the Easy Seal Underlay. Leave until it is touch dry. Pre-bituminised boards do not need priming. The upper surface of the underlay itself does not need priming prior to laying the cap sheet.

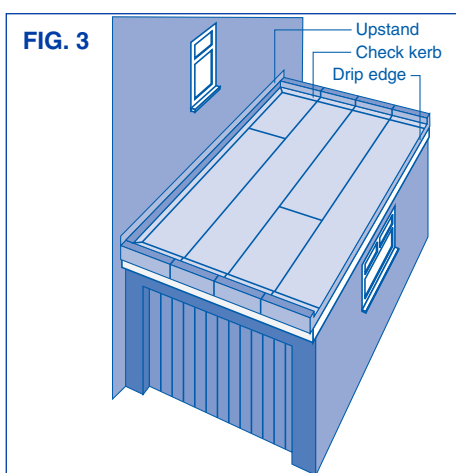
Supplied in 2.5 and 5 litre tins. One litre should be sufficient for 4-6m² of roof area.

Wickes High Performance Felt Lap Adhesive.

This is used to seal the Easy Seal cap sheet where it is being applied to a green slate surface, i.e. end laps and upstand details. Supplied in 310ml cartridges. The cartridge will fit standard cartridge (skeleton) gun. Coverage is approximately 3 linear metres, at a bead width of 8-10mm.

Wickes Easy Seal Self Adhesive Roofing System.

The amount of materials required for any flat roof will depend on how simple or complex the roof construction is. The number of changes of surface level, water run-offs, curves, flashings, and gutters will determine the amount of material required. The following gives a rough guide to calculate the basic requirements.



Wickes Easy Seal Underlay and Wickes Easy Seal Cap Sheet

Underlay is supplied in 8 x 1m rolls and cap sheet in 6 x 1m rolls. Calculate the flat area of your roof in square metres (see Fig. 3), length x width. Add 10% for laps and wastage. Add to this the total linear metreage of the upstand detail (the abutment with main house, if applicable) of your roof multiplied by 0.3m.

Where there are larger upstand details such as parapet walls the multiplier of 0.3m will not be adequate; additional material will have to be allowed for.

Divide total square metres by eight for underlay and six for cap sheet to give you the number of rolls you need.

Here is a helpful formula:

Flat roof area (length x width) = m²

10% for laps etc.

(area m² x 0.1 m) = m²

Roof perimeter x 0.3 m** = m²

Total = m²

Divide by 8 for underlay = rolls required
Divide by 6 for cap sheet = rolls required

Note: m² coverage is given as a general guide only.

Quantities of primer, membrane and mastic may need to increase if roof edges are long and shapes and details are intricate or complex.

Wickes Easy Seal S.A. Primer and Wickes High Performance Felt Lap Adhesive should be kept sealed in a cool, dry, well-ventilated environment. All practical precautions should be taken to protect from fire. For Safety data information call the helpline number at the end of this guide.

Use only in a well-ventilated area, and away from sources of ignition.

Read and follow all roofing product safety instructions, and use recommended personal protective equipment consisting of gloves, overalls and boots.

Additional materials required for detailing (All available at Wickes)

Galvanised Clout Nails

Clout nails should be 20mm long with extra large heads, and calculated on the basis of twenty-one nails per linear metreage run of roof at the kerbs and gutter edges.

Angle Fillets

Timber angle fillets can be bought already cut to a triangular section, 75 x 75mm. Wickes Arris Fencing Rails are ideal. See Fig. 4 & 5.

Drip Battens

Lengths of timber Approx., 50 x 25mm. Wickes exterior sawn treated 22 x 47mm timber is ideal. See Fig. 4 & 6.

Kerb Edge Battens

Lengths of timber Approx., 75 x 50mm. Wickes exterior sawn treated 47 x 75mm timber is ideal. See Fig. 4.

Hardboard formers

Cut hardboard formers from sheets available at Wickes, 75mm wide, and prime with Wickes Easy Seal S.A. Primer. See Fig. 4 & 6.

Tools Required (All available at Wickes)

- A tape measure
- Trimming knife complete with a straight edged blade and hooked blade
- Straight Edge
- Claw Hammer
- 75mm to 100mm wide paint brush
- Soft headed broom or cloth
- Flat blade spreader or trowel
- Cartridge (skeleton) gun
- Wood saw
- Hot air gun to aid application on cool days

General

Wickes Easy Seal Roofing components if used during the winter months should be stored at between 10°C and 25°C for 24 hours prior to use. It should not be laid at temperatures below 5°. If applied at temperatures between 5°C and 10°C the membrane should be gently warmed at all of the details that involve folding and at all side

and end laps to ensure proper sealing. Use a Wickes hot air gun for this purpose. The heat should be just sufficient to warm the membranes, do not melt the components or make them hot.

New roofs

For new roof structures, first ensure that materials to be used are suitable for purpose (refer to Roof Design, felts and deck materials), or call the Helpline number at the end of this leaflet).

Existing roofs

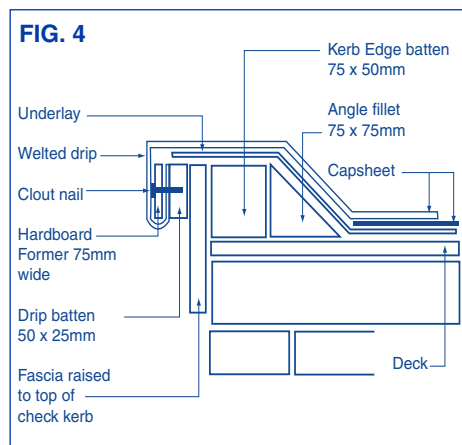
Read the General Section on Safety about the risks of injury due to falling through or off the roof before venturing onto it.

For an existing roof, where the material needs replacing, strip off all old roofing felt and covering, then fill knots, large holes and gaps in the timber or other material deck surface. Flatten or cut off any projections that may interrupt or interfere with the smooth line of new roofing felt. If the surface is still too rough or uneven it may be possible to fix an overlay of WPB Plywood minimum 6mm thick so as to give an ideal flat smooth surface.

Check Kerbs

Timber kerbs firmly fixed to the deck along an edge of a roof to prevent water run-off and direct water to the drip/gutter edge. See Fig. 4.

The welted drip detail gives a neat matching finish and will reduce the risk of water that has been blown over the Check Kerb making its way into the roof structure. The welted drip is formed out of Easy Seal Capsheet, firmly fixed drip battens and hardboard strips. See Fig. 4.



Upstands

The point on a roof where the deck meets a vertical surface such as a wall. The internal angle should be filled with an angle fillet fixed firmly to the deck. The roofing felt must always be dressed up the vertical surface by at least 150mm above the roof surface. The membrane is usually fixed into a chase or underneath a flashing. See FIG. 5.

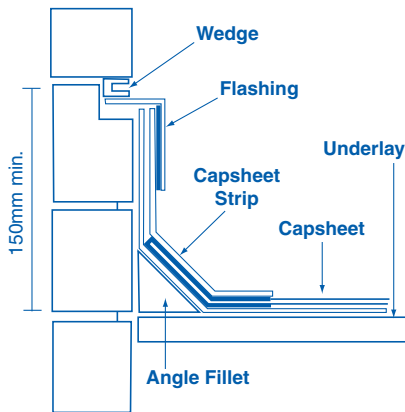
Flashing

A lead or roofing material strip that has been let into a mortar line or cut into masonry and sealed to allow the run-off of rainwater from

the wall surface. The lower edge of the flashing strip will overlap the top edge of roofing material to ensure a weathertight seal.

The Wickes **Good Idea Leaflet No. 22** "How to use Wickes lead sheet and accessories" gives further information. See Fig. 5.

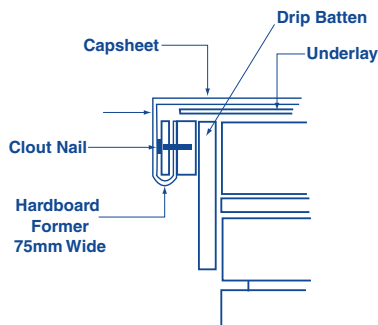
FIG. 5



Welded Drip to Gutter Edge

The drip/gutter edge is the point on the roof where the water runs off into the gutter. The welded drip is formed out of Easy Seal Capsheet, firmly fixed timber battens and hardboard strips. It is designed to ensure the effective run-off of rainwater into the gutter. See Fig. 6.

FIG. 6



PREPARATION & TRIMMING

Prime surfaces

Prime all deck and detail surfaces with Wickes Easy Seal S.A. Primer, ready to receive the Wickes Easy Seal Roofing Felt. Prime all walls up to and including the chase following the instructions on the Wickes Easy Seal S.A. Primer can. Generally the product is touch dry in one hour and is then suitable for the application of the underlay. In practice it's normal to leave a section of the roof clear at the ladder point so as to act as a working and storage area until last underlay strips need to be laid.

Important: Wickes Easy Seal S.A. Primer is not a waterproof coating for flat roofs; it is only preparing the deck surface to receive the Wickes Easy Seal Underlay felt. Using

other primers may result in incompatibility with the Easy Seal Underlay.

APPLYING THE WICKES EASY SEAL UNDERLAY

Measuring & lying out

Wicks Easy Seal underlay has a non-removable polythene top surface and an adhesive under surface protected by release paper.

Lay out the underlay with the release paper intact and cut the underlay to the size required.

Note: It's best to use a hooked blade and metal straight edge when cutting.

The underlay will usually be laid in strips running parallel with the gutter/drip edge. The first strip of underlay should be cut to half its width along its length. This will allow for staggered joints when applying the cap sheet. The length of each strip required should provide for covering angle fillets as necessary.

If the length of the roof is longer than an 8m roll, allowance should be made for overlaps of 75mm where two ends of roll join.

Allowance should be made for roofing material to form the upstands. With the correct amount of underlay strips cut, you are ready to apply the self-adhesive underlay to the deck.

Start at the gutter edge

Starting from the lowest point of the roof (the gutter/drip edge) lay out the first felt strip in its correct position on the roof. This first strip of underlay should be laid as shown in fig. 6. Next, roll half of the strip back towards the centre to expose the release paper underneath.

At a point close to the centre of the strip that has been folded back, carefully cut the release paper across the width of the roll with a trimming knife using a new straight edged blade without cutting through the underlay. If the release paper is not cleanly cut all the way across, it will not separate properly.

Peel the paper

Peel back some of the release paper to expose that part of the underlay, which is now ready for sticking to the deck. You will be, therefore, working from the centre of the strip towards a roof side edge.

Gradually peel back a section of the release paper at a time whilst pressing down the self-adhesive side of the underlay onto the decking, using a rag or soft-headed broom to eliminate air bubbles.

Where two ends of strip need to be joined, overlap the ends by 75mm and ensure that all overlaps face the same direction.

All joints should be staggered so that no two overlaps appear in the same position on adjacent strips.

Securely press the underlay into any angles that are encountered; acute angles can be more easily stuck with pressure from a cloth, soft broom or, if necessary, a wallpaper roller or similar.

Repeat this procedure for the other half of the membrane.

Then repeat this procedure for each strip or strips, starting at the centre of the strip working to one side and then repeating the process to the other side.

Each additional strip should overlap each lower strip along its length by 75mm.

Up the wall

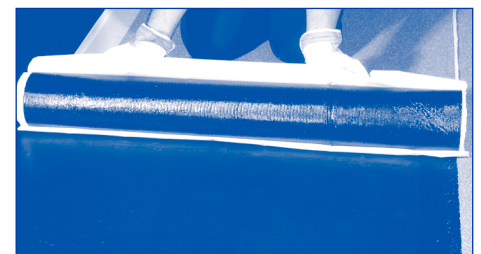
If there is a vertical wall where the highest point of the deck ends, the underlay will need to go up the wall by 150mm from the finished roof surface. It is usually easier to do this with separate pieces of membrane cut to the required size.

Cover all areas

Finally, check that all areas of the decking, kerbs and upstands are covered with underlay and that any trapped air bubbles have been removed to achieve as smooth a surface as possible.

Where there are internal and external corners to be waterproofed, the membrane will need to be cut and positioned according to instructions.

APPLYING WICKES EASY SEAL CAPSHEET TO EAVES & VERGES



The Gutter/Drip Edges formed in the capsheet. See Fig. 7.

These strips form the welded drip edge at the lowest point of the roof i.e. where rainwater will be required to run off the roof into a gutter. The width measurement of the cap sheet strips will be twice the width of the hardboard former plus a minimum of 150mm to go back onto the roof. The length of the strips is determined by the length of the drip edge with an allowance for overlaps. First cut sufficient strips to accommodate the length of the roof.

Next nail the capsheet strips, starting from one end of the roof and working along the drip edge, carefully nail, using clout nails, the first strip of capsheet to the drip batten, with the release paper peeled back slightly to expose the self-adhesive underside of the capsheet.

The top edge of the cap sheet will be flush with the top of the drip batten and the remainder of the strip is hanging down with the self-adhesive side facing away from the roof and the slate green mineral side facing the building. For the moment leave all the release paper in position only peeling back sufficient to

expose enough of the self-adhesive side to nail onto the drip batten.

With all of the strips across the length of the gutter/drip edge in place, hanging down like a curtain off this edge, take the primed hardboard formers and nail them, using the large head clout nails, to the drip batten, so that the capsheet strips are sandwiched between the hardboard former and the drip edge batten.

The selvage edge

Along one edge, on the top (green slate mineral) surface of Wickes Easy Seal Capsheet, is a strip of release paper covering a self-adhesive strip. (This selvage edge is for overlapping and sticking one piece of capsheet to another to form a weathertight seal). You should always ensure that the selvage is on the side where your next piece of capsheet is to be applied.

Fold over welts

Remove the remainder of the release paper from the self-adhesive underside of the capsheet and draw the capsheet up over the hardboard former and onto the roof to stick to the Underlay that is already in place. At the point where these capsheet strips meet the kerb areas, the capsheet should be cut to avoid creases and folds.

See Fig. 7.

Note: The portion of the capsheet strip that is on the roof will be covered by a further strip of capsheet, detailed in later steps, to form a tough, watertight seal. **Corner detailing, See Figs. 8 & 9.**

Kerb edges

Finishing the kerb edges is the same procedure as making the welted edge on the gutter/drip edge, but the finishing sheet will need to be bonded to the slate green surface with the lap mastic. **See Section: Raised Roof Edges and Upstands.**

Applying Wickes Easy Seal Capsheet to Main Roof Area.

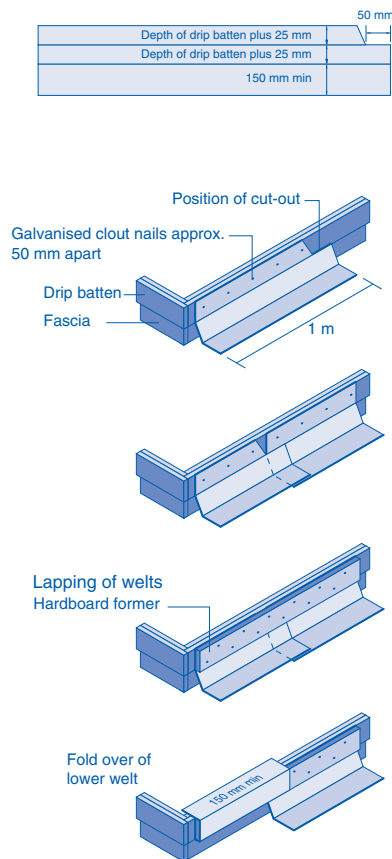
Measure & layout

The Capsheet is laid in the same direction as the underlay. The strip of capsheet should be laid out with the selvage edge to the middle or where the next roll of felt is to come. Lay out and cut the capsheet strips to size in exactly the same way as the underlay, allowing for a minimum 75mm lap over the drip/gutter detail that's already been laid at the drip/gutter edge. Lay out the cap sheet with the release paper intact and cut the capsheet to the size required. Ensuring that end laps and side joints do not coincide with those of the underlay. Use the same method of applying as for underlay. The capsheet will be laid in strips running with the joints staggered but not overlapping any underlay joint.

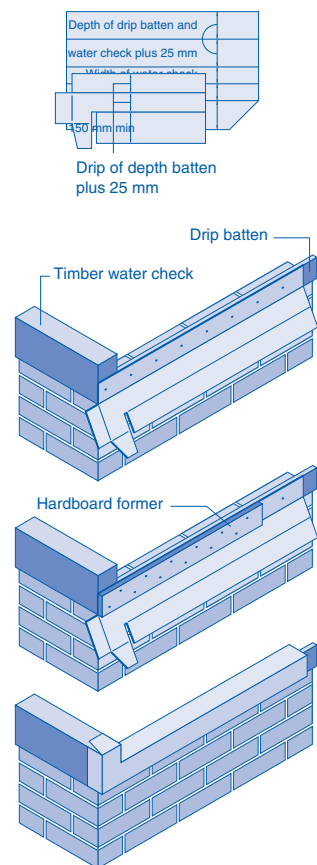
Where two ends of strip need to be joined, overlap the ends by 75mm and ensure that all overlaps face the same direction. All joints should be staggered so that no two overlaps appear in the same position on adjacent strips.

FIG. 7

Welted drip at eaves or verge



Junction of drip edge and check kerb



Securely press the capsheet into any angles that are encountered. Repeat the procedure



for all strips of capsheet until the deck area is completely covered. Upstands are completed once the main area of the roof is done. **See Figs. 10, 11 & 12.**

To seal the capsheet, where it is being applied to a green slate surface, i.e. drip/gutter edges, end laps and upstand details, use Wickes High Performance Felt Lap Adhesive.

Applying Wickes High Performance Felt Lap Adhesive

Apply a generous snaking 5mm bead of Wickes High Performance Felt Lap Adhesive to the topside of the lower cap sheet surface, across a band of 75mm or so. Using a spreader, spread the Lap Adhesive evenly over the surface of the capsheet.

FIG. 8 Welted drip at internal corner

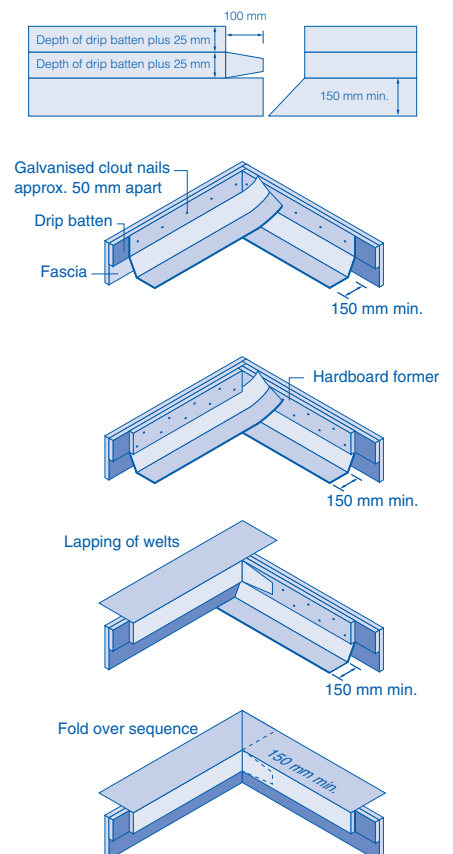
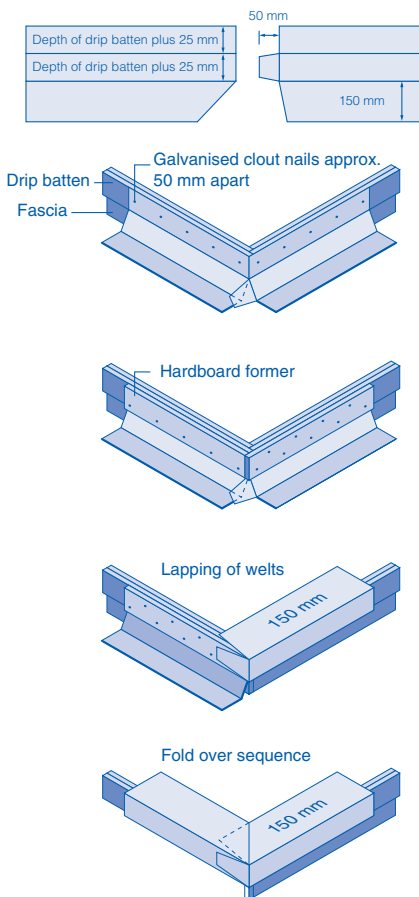


FIG. 9 Welted drip at external corner



Firmly press the top strip of capsheet down onto the Lap Adhesive to join the two surfaces together in a watertight bond.

On the typical flat roof the remaining areas to be finished are the edges and the upstands.

Tip – If you have spots of adhesive or excessive bitumen spoiling another wise perfect job, rub together two pieces of waste capsheet and collect the resulting slate granules onto a sheet of paper material. Pour this onto any excess; it will stick leaving a professional looking finish.

Note: Additional advice for the Wickes Easy Seal Roofing System is available by contacting the helpline shown at the end of this leaflet.

Further advice on installing Wickes roofing products is available by contacting the helpline shown at the end of this leaflet.

RAISED ROOF EDGES & UPSTANDS See Figs. 10, 11 & 12.

FIG. 10 Wall and upstand external angle

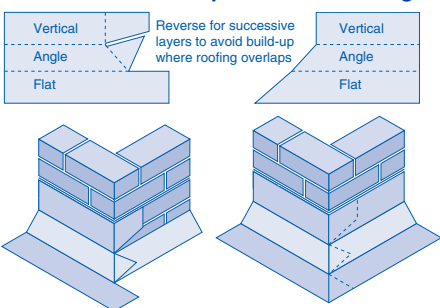


FIG. 11 Junction of welted apron and wall upstand

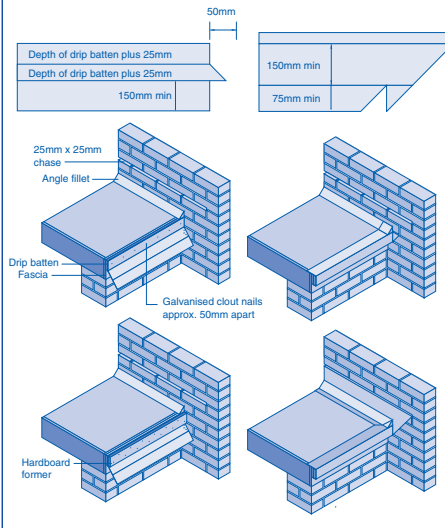
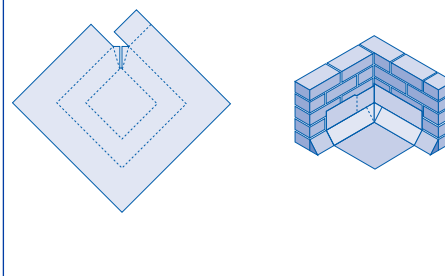


FIG. 12 Wall and upstand internal angle



WICKES TORCH-ON CAPSHEET & UNDERLAY

These are excellent tough polyester based roofing felts, with an APP polymer modified bitumen coating applied during manufacture, so that a boiler and separate bonding bitumen are not required. All that is required is the heat from a suitable torch. The APP stands for atactic polypropylene, which offers improved flexibility over oxidised bituminous systems. They have on their reverse side a non-removable thermofusible film, this is to stop the membrane sticking prior to use and it should not be removed. Designed for use by experienced and competent roofers, it is generally not suitable for DIY'ers.

The system incorporates a polyester based underlay and the top cap sheet is surfaced with green slate granules. The system is suitable for use on habitable buildings, and an external fire rating of F.A.C. when tested to BS 476 Part 3:2004. The Wickes Torch-On system correctly installed complies with Building Regulations: England, Wales, Scotland and Northern Ireland.

Never assume that a job is suitable for torch-applied materials. Some jobs are simply too dangerous. This applies particularly to details where combustible materials may be hidden from view or to material stored near the torching operation. For these jobs consider using the flame free Wickes Easy Seal Self Adhesive System also featured in this guide.



Torch-on products are installed using a purpose made roofing gas torch. They can be torched directly onto sound, unchipped, clean and dry existing waterproofing.

See Fig. 14. Timber decks should not be torched directly, due to the fire risk, A nailed torch receivable surface must be applied prior to torching. Wickes High Performance Polyester Underlay is ideal for this purpose. It should be random nailed at 150mm centres over the whole surface and at 50mm centres along the minimum 75mm side and end laps and exposed perimeters. Including all timber details. **See Fig. 13.**

FIG. 13

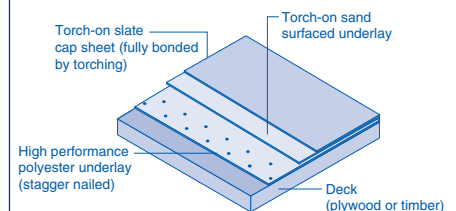
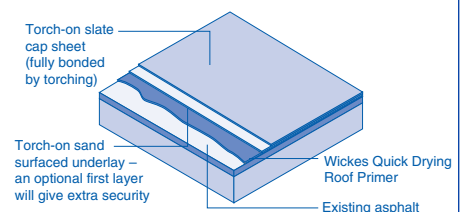


FIG. 14



Unsuitable surfaces for direct torch-on application

- Timber, Plywood, Chipboard and all Insulations other than those specifically designed, tested, and found to be safe
- Felts, traditional, Type 3G and lightweight polyester with a polyester weight of less than 150g per m²
- Details such as expansion joints filled with fibreboard or foam
- Forming a detail under pitched roof where sarking/slaters' felt may be hidden from view, and old debris such as birds nests may be present
- Forming a detail under cladding where the insulation is combustible
- Forming details to plastic roof lights
- Exposed fibreboard fillets

It is essential that the correct type of torch and set of equipment is used. This equipment must include the correct gas regulator and a torch that has a trigger control, which when released reduces the flame to a pilot. It is preferable that the torch should also incorporate a stand. There are 2 types of torches, one used for detail work, with a low output burner and short stem, and another for the main area with high output burner and a long stem to allow the operative to stand upright during the torching operation. The hoses used must be a high pressure type complying with BS3212, at least 3m long. Crimped type clips must soundly secure all fittings to the torch and hose. All equipment must be suitable for purpose and inspected prior to use by a competent person. Further guidance is in the guide issued by the, Liquefied Petroleum Gas Association: Code of Practice 24 The use of LPG cylinders.

Depending on the laying technique used it may be necessary to provide a roll bar for the application of torch-on materials and a round nosed trowel for the treatment of the angles.

Note: Torch-on membranes should only be installed by a competent applicator, who is used to using hot bonding methods. Care must be taken when applying torch-on membranes in close proximity to combustible materials, decorative coatings and heat sensitive materials, to avoid any fire risk. The necessary fire extinguishers and fire precautions must be on hand and the operatives trained or familiar with their use. There is also a risk of injury due to burns. Full protective clothing must be worn and a bucket of clean cold water or similar at hand as first aid treatment to cool burns. The contractor should always inform the client that a hot fixing method is to be used prior to commencement of work and should comply with any rules issued by the client with respect to this information and any risk assessment performed under the requirements of applicable Health and Safety and Fire Safety Regulations. Further advice on installing Wickes roofing products is available by contacting the helpline shown at the end of this leaflet.

Important

It is the responsibility of the client/houseowner/applicator/specifier to confirm that insurance is either in place and/or has not being invalidated by the use of hot works or gas torches with the respective insurers of the trading entity/building and/or its contents.

Wickes and their suppliers shall have no liability whatsoever to the client/houseowner/applicator/specifier in respect of any costs, losses or expenses arising from the use, application and specification of Wickes Torch-on systems.

Typical Systems & Specifications

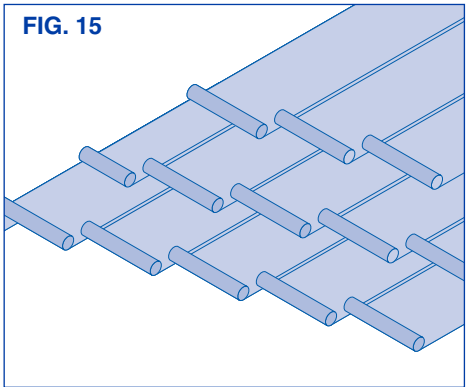
In general specifications may take the following forms:

- One layer torch-on fully bonded to existing sound and primed* built-up roofing or asphalt depending on surface condition
- Two layer torch-on fully bonded to existing sound primed* roofing or to a nailed underlay on timber decks
- Two layer torch-on with the underlay part bonded by torching in patches to existing or to a safe deck such as primed concrete*

Wickes Quick Drying Roof Primer is suitable for preparing the surface prior to torch application. Applied in accordance with the instructions on the tin.

Torch Application

The membrane should be cut so that when laid, the side and end laps are staggered. **See Fig. 15.**



Apply torch-on roofing by melting the heat dispersible backing and coating to create a molten flow in front of the roll. The flame of the torch should be applied at the low point where the roll meets the Underlay. As the film and bitumen melts, roll the roofing forward. NB. A bead of bitumen must exude from all lap joints to ensure a seal. There is no question of leaving clean laps. The side laps must be a minimum of 75mm with 100mm minimum end laps.

The detailing is done with the small torch.

WICKES HIGH PERFORMANCE POLYESTER CAPSHEET & UNDERLAY

This system is equally suitable for cold adhesive application using Wickes Bituminous Roofing Felt Adhesive or pour and roll application using hot bitumen. Please contact the helpline at the end of this guide for information about using hot bitumen.

The membranes are composed of a polyester base, saturated and coated with oxidised bitumen. This offers a higher degree of performance strength and stability compared to fibre based felts. Bonded with Wickes Bituminous (Cold-applied) Roofing Felt Adhesive or hot bonding bitumen, this is predominantly laid in two or three layers. The system is suitable for use on habitable buildings, and has an external fire rating of

F.A.C. when tested to BS 476 Part 3:2004. The Wickes High Performance system correctly installed complies with Building Regulations: England, Wales, Scotland and Northern Ireland.

The products can also be used on garden buildings where increased performance/durability is required.

Typical Systems & Specifications

In general specifications may take the following forms:

- Two layers on primed* concrete or Plywood or Type 3 OSB. The first layer Wickes High Performance Polyester Underlay partially bonded in strips of Wickes Roofing Felt Adhesive with laps fully bonded in adhesive. The Top layer to be Wickes High Performance Polyester Capsheet fully bonded in Wickes Roofing Felt Adhesive. All side and end laps staggered. **See Fig. 16.**

- Three layers consisting of a nailed underlay on timber plank decks then a layer of Wickes High Performance Polyester Underlay followed by top layer of Wickes High Performance Polyester Capsheet both fully bonded in Wickes Roofing Felt Adhesive. All side and end laps fully sealed and staggered. **See Fig. 17.**

* **Wickes Quick Drying Roof Primer** is a suitable primer for preparing a concrete or cement screed surface prior to bonding the first layer in strips of adhesive.

WICKES TRADITIONAL CAPSHEET & UNDERLAY

It is composed of a fibre base, which is saturated and then coated with bitumen and surfaced with either sand or a slate finish. Used in a single, two-layer or three-layer application, these products are ideal for use as temporary waterproofing or for use on sheds or garden buildings. Traditional Roofing Felts are not permitted for use on habitable buildings, such as domestic extensions except as an emergency short-term repair.

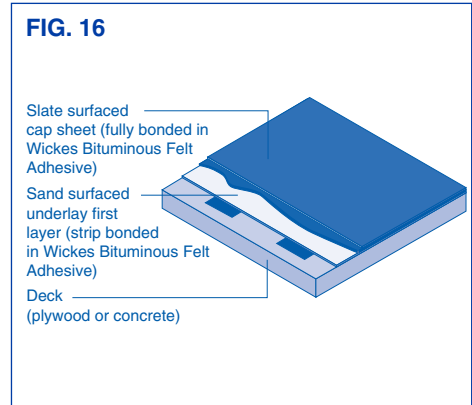
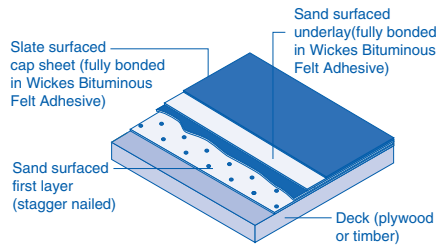
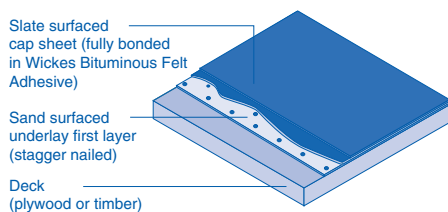


FIG. 17

Their application on flat roofs is very similar as for the Wickes High Performance Polyester System covered in detail in the previous section. **See Fig. 18.**

FIG. 18

Before you begin. Read the General Section on Roof Design and Good Practice at the beginning of this leaflet.

These felts are usually applied using cold adhesive only.

A nailed preparation is not counted as a waterproofing layer because of the nailing. However three layers can be used to achieve maximum life.

The advantage of cold adhesive is that it's much safer and little formal skill is needed.

Wickes Roofing Felt Adhesive

Wickes Roofing Felt Adhesive is a cold applied, black, bituminous roofing adhesive used for bonding bituminous roofing to itself and to wooden sheet decking, concrete asphalt, metal and similar surfaces.

Guide to Application

All surfaces onto which felt is to be fixed must be clean, sound, dry and free from grease, oil, dirt and loose, protruding or sharp material.

Wickes Roofing Felt Adhesive is ready for use and should not be thinned. Apply as per manufacturers instructions, so that there is no surplus beyond the finished edge of the lap. Unroll the roofing felt with consistent pressure; a broom is a useful tool, to avoid formation of air pockets. Firm pressure should be applied until overall adhesion is achieved.

Coverage

One litre of Wickes Roofing Felt Adhesive should be sufficient for 1-1.5m² of roof area.

Weather & Temperature

Try to ensure that the weather will be dry all

day and if possible that conditions are warm. Wickes Roofing Felt Adhesive and Roofing Felt should be used at a temperature above 5°C. Application will be easier if the adhesive and felt are placed in a warm environment for 24 hours prior to use. If external temperatures become extreme, it is advisable to postpone the project until more favourable temperatures pertain.

Equipment Care

Tools should be cleaned with white spirit

Packaging

Wickes Roofing Felt Adhesive is available in all stores.

Usage

Use only in a well-ventilated area, and away from sources of ignition.

Read and follow all roofing product safety instructions, and use recommended personal protective equipment (PPE).

Storage

Wickes Roofing Felt Adhesive should be stored, sealed, in a cool, dry, well-ventilated environment. All practical precautions should be taken to protect from fire.

WICKES SUPER SHED FELT & SHED FELT

Bitumen coated roofing felt with a protective and decorative fine green mineral finish. It is specially suited for single layer application to the roofs of garden sheds, kennels, hatched and other non-inhabited buildings, which have a roof pitch of 20° or more.

It is designed to be nail fixed with the laps sealed with Wickes High Performance Felt Lap Adhesive.

Additional Tools Required (All available at Wickes)

- A tape measure
- Trimming knife complete with a straight edged blade and hooked blade
- Straight Edge
- Claw Hammer
- 13mm large headed galvanised clout nails.

Fig. 19. Identify the roof parts as shown. Remove old roofing felt and check the surface. Ensure old uneven boards are hammered down and secure. Remove nails or hammer home.

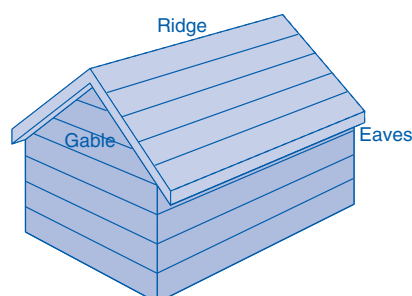
FIG. 19

Fig. 20. Cut each strip of felt so that it overhangs the edges of the roof by 50mm. Place the first strip of felt at the lowest part of the roof so that it overhangs the eaves by 50mm. Fix in position by nailing the top edge of the felt with clout nails at 500mm centres.

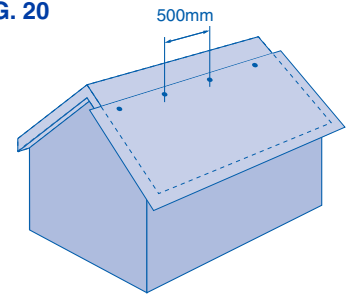
FIG. 20

Fig. 21. Slowly and carefully fold overhangs over the edges of the roof and nail at 50mm intervals. Fold and nail corners to make a neat appearance.

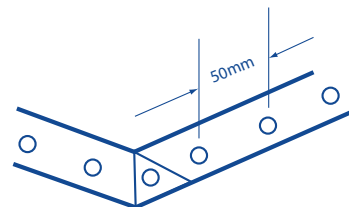
FIG. 21

Fig. 22. Place each subsequent sheet so that it overlaps the previous sheet by 75mm and fix as before. Carefully apply Wickes High Performance Felt Lap Adhesive to the area between the overlapping sheets and finish the joint by nailing at 50mm intervals.

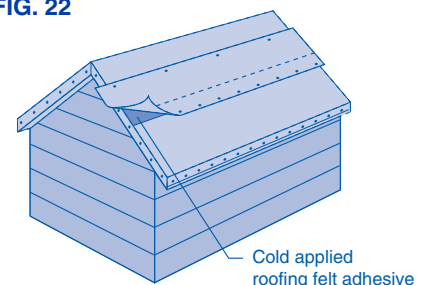
FIG. 22

Fig. 23. To finish the roof ridge, cut a capping strip 300mm wide. Fix to the ridge with Wickes High Performance Felt Lap Adhesive and dress down the roof 150mm each side. Nail the lower edge at 50mm intervals.

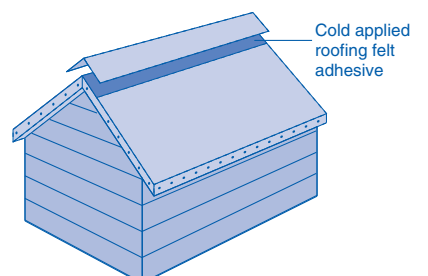
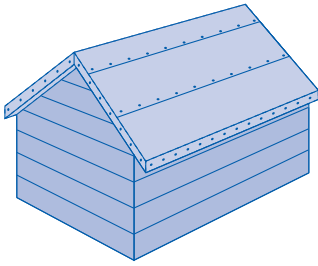
FIG. 23

Fig. 24. For a professional finish, fix timbers strips to the gable ends.

FIG. 24



WICKES PITCHED ROOFING SYSTEMS

Underslating Membranes (Sarking Felts)

Conventional pitched roofs covered with tiles or slates require an underlay so as to comply with the Building Regulations. The purpose of an underslating membrane is:

- Provide a secondary barrier to the ingress of wind-driven rain, snow and dust.
- Allow any water that has penetrated the batten space to escape to the gutters.
- Reduce the risk of wind uplift acting on the slates or tiles.
- Afford some temporary protection to the building prior to final roofing.

There are two types of underlay, Breather and Non-breather. Wicks Reinforced Slaters' Felt is a non-breather underlay and consists of a bitumen saturated felt. In a typical roof it is laid across the roof draped 10mm to 15mm between the rafters with the tiling battens fixed above. The main point to remember with a non-breather membrane is the mandatory requirement to ventilate the void below the underslating and above the insulation, using openings at high and low level.

Recent developments in construction mean that "Room in Roofs" are increasing in popularity. The insulation is typically fitted between and below the rafters above the sloping ceilings. This arrangement allows homeowners and developers the opportunity to utilise the previously non-habitable loft space so adding value to their property by increasing the living area.

Modern lifestyles generate a lot of water vapour, which can cause excessive condensation. This can affect the health of the occupants and damage the fabric and structure of the property. Fibrous insulation such as mineral wool can become sodden and lose its thermal effectiveness. Recent increases in the thickness of insulation and reduction in the ventilation within the modern home due to an increase in draught protection and the use of double-glazing are making modern homes vulnerable to condensation.

The normal method of creating cross ventilation through the roof voids is often not feasible when the roof is dotted with features like dormers and flush mounted windows.

Installing Wickes Breathable Membrane, allows the builder to sidestep the need to create specifically ventilated voids that are normally required to comply with Building Regulations. It has full BBA certification for use on both cold and warm roofs both ventilated and unventilated.

Wickes Breathable Membrane

This is a high performance, lightweight, breathable underlay for tiled, slated and metal pitched roofs. It can be used for warm or cold roofs (ventilated and unventilated) and can also be used behind vertical wall cladding. Wickes Breathable Membrane allows the escape of water vapour from within the roof structure whilst protecting the building from wind driven rain, snow and dust, which may penetrate the main roof waterproofing, providing a permanent quality breather underlay, which will last the life of the roof construction. Wickes Breathable Membrane is a BBA certified, cost effective breather membrane, which combines optimum performance; ease of application and value for money.

The upper surface is grey and printed with a grid

Available in 1.0m widths as standard to conform easily to any typical roof configuration or the individual working practices of the installer.

Warm Or Cold Roof Application (Ventilated Or Unventilated Void)

Features and benefits

- BBA certificate – no. 08/4537 (warm roofs/cold roofs ventilated and unventilated void)
- Highly breathable and water resistant membrane
- Long Term Durability
- UV Stable (3 months exposure)
- Adaptable and easy to use (1.0m widths)
- High tensile and tear strength
- Printed "Easy-Cut" Grid Marking, to reduce wastage on upper side.
- Multipurpose, lightweight and flexible

Wickes Breathable Membrane is engineered as a fully supported or unsupported breathable underlay for tiled, slated or metal roof systems. Wickes Breathable Membrane is equally suitable whether draped 10mm – 15mm unsupported over rafters, laid directly over insulation or laid over traditional Scottish sarking planks. It is ideal for warm or cold roof applications (ventilated and unventilated).

WARM ROOF APPLICATION

Warm roofs (featuring sloping insulation below the tiles or slates) are often called 'room in roof'. The breather membrane is laid above the insulation. Measures to reduce the passage of moisture vapour through the insulation should always be taken, examples

include specifying foil backed plasterboard or substituting glass fibre wadding with tightly fitting foil faced rigid sarking insulation with taped joints.

In Addition, a warm roof contributes to increased air tightness, reducing heat loss by uncontrolled air movements and aiding compliance with revised Part L of the Building Regulations. (April 2006)

COLD ROOF APPLICATION

There are two types of cold roof – ventilated and unventilated. A ventilated configuration is the traditional type, it has ventilation openings at low and high level to draw moisture vapour safely to the outside. The insulation (if it exists) is placed between the joists of the ceiling of the upper storey (effectively on the floor of the attic space).

In an unventilated cold roof the insulation is again laid between the joists of the upper storey ceiling. However, the attic space does not feature specific ventilation openings so Wickes Breathable Membrane is essential to enable the moisture vapour to escape to the outside. If a traditional non-breathable underslating felt is used, then the lack of ventilation will allow the moisture to build up within the attic space with potentially disastrous results.

In both cases measures to reduce the passage of moisture vapour through the insulation should always be taken, examples include sealing all penetrations into the void and covering up water cisterns.

Correctly installed, Wickes Breathable Membrane will effectively last the design life of the slate or tiled roof into which it is incorporated.

Notes:

1. As with all breather membranes of this type, contact with solvents or wet timber preservatives can cause localised water penetration to occur, prior to the main weatherproofing being installed.
2. In accordance with **BS 5534: 2003** "Code of practice for slating and tiling" - **Section 5.5.2.7 (c)**, where a roof underlay or breather membrane is to be laid over open rafters, a drape of between 10mm to 15mm between the rafters is necessary to guide any rainwater penetrating the main roof finish away from the rafters to the drainage point. (The membrane must not be pulled tight against the underside of the tiling battens.)
3. Wickes Breathable Membrane has a UV resistance for up to 3 months. However the exposed Wickes Breathable Membrane should never be considered as being proper protection against wind blown rain, heavy snow/hail and high winds.
4. If the final roof finish is tightly fitting interlocking manmade tiles or metal sheeting with inadequate gaps to allow fortuitous ventilation between the individual units, it may be necessary to

create a 50mm deep continuous ventilated space above the Wickes Breathable Membrane. Check with the roof covering manufacturer. Further explanation is in **BS5250** "Code of practice for control of condensation in buildings" for ventilation requirements.

Application

Wickes Breathable Membrane is laid printed side up, white side down. Wickes Breathable Membrane must be installed in accordance the relevant sections of **BS5534: 2003** and Wickes fixing instructions. Wickes Breathable Membrane, when installed as a fully supported system, is laid over the support and secured with counter-battens, alternatively the membrane can be installed over counter-battens with a 10mm –15mm drape and fixed at 200mm centres using corrosion resistant staples or galvanised clout nails. Tiling battens are fixed to the counter-battens leaving a void between the membrane and tiling battens for drainage and ventilation. When using Wickes Breathable Membrane under normal double lapped slates or tiles in a warm roof configuration, no additional ventilation is required within the roof void.

Wickes Breathable Membrane, if installed in a cold roof configuration and draped 10-15mm over open rafters, with normal slates or tiles above, then the use of counter battens is not required and there is no requirement for ventilation of the void space.

Abutment flashings should be wedged into a mortar joint 25mm deep and at least 150mm above the level of the slates or tiles. The Wickes Breathable Membrane should be turned up behind the flashing at least 100mm to prevent rain and snow being blown into the roof-space. The Wickes Good Idea Leaflet No. 22 "How to use Wickes lead sheet and accessories" gives further information.

Lap joints in the membrane should be generally in accordance with the table set out below.

Lap Size Table

Roof Pitch	Minimum Horizontal Lap Partially Supported (mm)	Minimum Horizontal Lap Fully Supported (mm)	Minimum Vertical Lap (mm)
12.5° - 14°	225	150	100
15° - 34°	150	100	100
35° +	100	75	100

Where Wickes Breathable Slaters Felt is to drain into a half round external gutter, a robust eaves protection strip should be utilized. Wickes High Performance Polyester Underlay cut to half its standard width i.e. 500mm, then laid parallel to the gutter ensuring that water drains into the centre is ideal. This will ensure long-term performance of the membrane in this location, preventing water from running behind the gutter, rotting

timber fascias, wall plates and rafter ends.

WICKES REINFORCED SLATERS' FELT

Slaters' Felt is manufactured specifically for use beneath tiles or slates in open rafter construction. Wickes Slaters' Felt has a felt fibre base combined with a layer of open weave hessian, saturated and coated with bitumen, and surfaced with sand. Furthermore it complies with **BS 8747:2007 Annex B**. Formerly known as **Type 1F**.

Wickes Reinforced Slaters' Felt (Sarking) should be used for tiled and slated pitched roofs, with void spaces ventilated in accordance with **BS 5534: 2003**. It conforms to current Building Regulations, and is a traditional secondary barrier against driving snow and rain.

Where Wickes Reinforced Slaters' Felt is to drain into a half round external gutter, a robust eaves protection strip should be utilized. Wickes High performance Polyester Underlay cut to half its standard width i.e. 500mm, then laid parallel to the gutter ensuring that water drains into the centre is ideal. This will ensure long-term performance of the membrane in this location, preventing water from running behind the gutter, rotting timber fascias, wall plates and rafter ends. For information on laps see the Lap Size Table in the previous section.

WICKES ROOFING SHINGLES

Wickes Roofing Shingles are ideal for use on a range of non-habitable buildings such as stables, garden sheds, garages, bus shelters, garden chalets, summerhouses, etc.

They consist of a glass fibre base, coated with oxidised bitumen and surfaced with attractive coloured mineral granules. If the building is sheltered they can be laid as low as 15° pitch. For more exposed sites the roof pitch should be a minimum of 20°. For severe exposure sites such as beach huts we recommend that a minimum of 30°.

They are designed to be nail fixed. For a robust long lasting job the minimum deck thickness of the deck should be 18mm. Details and perimeters should be sealed with Wickes High Performance Felt Lap Adhesive.

Additional Tools Required (All available at Wickes)

- A tape measure
- Trimming knife complete with a straight edged blade and hooked blade
- Straight Edge
- Claw Hammer

When applied in accordance with the fixing instructions, shingles are easily installed and will provide a long lasting, highly decorative, weatherproof roof finish in a variety of pitched roof situations.

Roofing Shingles are factory cut into strip form. To improve adhesion of the tiles, the Square Butt Slates have a heat sensitive

bituminous strip on the topside, on the reverse side there is a polyethylene strip to prevent sticking in the pack during transit. This strip does not need to be removed. The advantage of this product is that it is long lasting, economical, attractive, easy to install and is made with a non-rotting glass fibre base.

Wickes also supply a matching detailing strip which blends in perfectly with the roofing shingles and enables tricky detail areas such as eaves, verges, hips and ridges to be quickly and easily weatherproofed.

Materials Needed

- Wickes Shingles
- Wickes High Performance Polyester Underlay.

Note: on less important buildings a single layer of Wickes Traditional Underlay can be used
- Wickes High Performance Felt Lap Adhesive
- 20mm Large Headed Galvanised Clout Nails
- * Under normal conditions allow one tube of

Product Dimensions	Wickes Shingles 4 Tab Square Butt
Pack Weight kg	19
Strip Slate - Depth mm - Length mm	336 1000
Strip Per pack	14

Shed size	Wickes Shingles No of boxes	Nails kg	Wickes Easy Seal Lap Mastic Cartridges (310ml)
6 x 4'	3	0.4	3*
8 x 6'	5	0.7	5*
10 x 6'	6	0.9	6*
10 x 8'	7	1.2	7*
12 x 10'	8	1.7	8*

Wickes High Performance Felt Lap Adhesive for each pack. If the tabs need to be fixed or complex detailing is involved allow an extra tube per pack. **Note:** These coverages are given as a general guide only.

FIXING INSTRUCTIONS

Preparation: Always strip off any old roofing material. Check that the roof decking is in good condition; if rotten replace it with a suitable roof deck

Underlay

Always use an Underlay below Wickes Shingles. The exact choice depends on the building use and expected lifespan. For High Value buildings such as garage/workshops use the rot proof Wickes High Performance Polyester Underlay. For structures such as Wendy Houses and tool sheds it may be economical to use the cheaper Traditional Underlay.

For roofs with pitches above 20°, lay the single layer of Wickes High Performance Polyester Underlay. **See Fig. 25.** It should be laid as flat as possible. Starting at the eaves, lay with 80mm horizontal lap and 150mm end laps. Secure the Wickes High Performance Polyester Underlay with only enough nails to hold it in place. The Wickes Shingles once nail fixed will hold it in position.

For roofs with low pitches of 15 to 20°, fix 2 layers of Wickes High Performance Polyester Underlay. **See Fig. 26.** Cut a 500mm starter strip first to be laid at the eaves. Lay with 500mm horizontal lap and with a minimum 300mm end lap.

FIG. 25

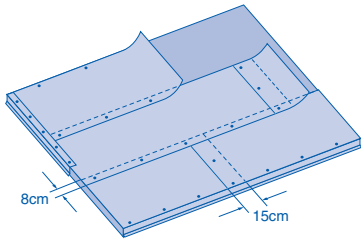
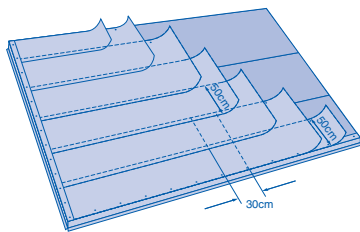
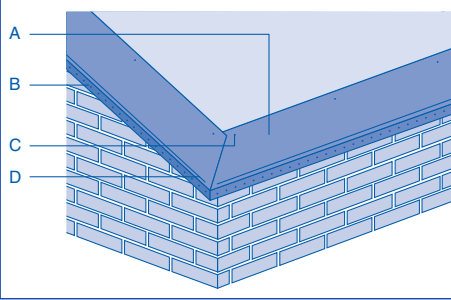


FIG. 26



- A** Apply Wickes Shingles Detailing Strip 300mm wide. Allow 50mm for turnover. **Fig. 27**
- B** Dress strip down 25mm below bottom edge of roof deck. Nail at 50mm centres, taking care not to overdrive nails.
- C** Tack-nail at top edge of Detailing Strip.
- D** In preparation for laying, the starting line of the first course of Shingles should be marked, set back 15mm from the edges as shown. Use a well-chalked string or a straight edge to provide a guideline.

FIG. 27



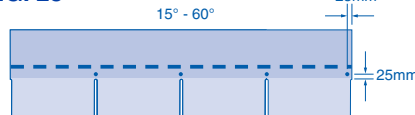
Repeat guideline every few courses to check alignment.

General Fixing

For standard exposure conditions and slopes (15-60° pitch), place one fixing nail 25mm from each end and one fixing nail directly above the centre line of each cut out (**See Fig. 28**).

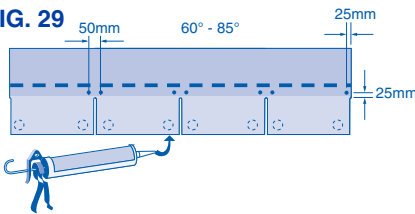
All fixings should be on a line 25mm above the top of the cut out. 20mm clout nails are the ideal fixings to use. Proper fixing increases the strength and wind resistance of the Shingle roof, so do not skimp. If a fixing will not penetrate the decking, use another nearby location. In high wind areas and on

FIG. 28



steep roofs (60-85° pitch), use 8 nails per Shingle Strip, placing one fixing nail 25mm from each end and 2 nails per cut-out, spaced 25mm left and right above each cut-out. **See Fig. 29.**

FIG. 29



For additional security, a small blob of Wickes High Performance Felt Lap Adhesive should be placed beneath the corners of each tab and over each nail head. Always leave a 2mm gap between the ends of individual Shingle Strip, to allow for minor adjustments in alignment. Avoid excessive use of Wickes High Performance Felt Lap Adhesive as this may result in runs down the roof.

First Shingle Course

Working from the bottom corner, fix the first whole Shingle strip and continue with whole shingles for the rest of the course. Repeat this process for all odd numbered courses as shown in **Fig. 30**.

Second Course

Trim 124mm of the Shingle strip then continue with whole Shingle strips on this course, and all even numbered courses, thus creating a staggered effect, as shown. The bottom edge of the Roof Tile Strip should just overlap the top of the cut outs of the underlying strip so there will be approximately 143mm of each tab exposed.

Note: If the site is severely exposed or the pitch is below 24 degrees, then the overlap should be increased so that only 130mm of the shingle strip is left exposed.

FIG. 30

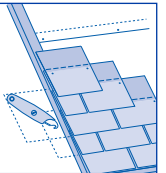
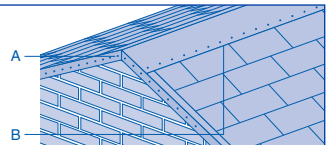


FIG. 31



Hips & Ridges

Adjust the last few courses of shingles so that the ridge capping will adequately cover the top courses of the shingles equally on both sides of the ridge. **Fig. 31.**

- A** Form from Detailing Strip 300mm wide. Cut and finish ends as shown.

- B** Bond into position using Felt Lap Adhesive

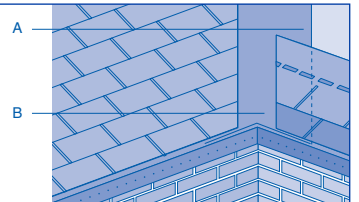
Valleys

- A** Form valleys from Detailing Strip. Bond into position using Felt Lap Adhesive

Where joints occur, laps should be 100mm. **Fig. 32.**

- B** Visible valley should not exceed 100mm width.

FIG. 32



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